

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Confirmation No. 7181

Appl. No. : 10/613,374  
Applicants : S. Datta et al.  
Filed : July 3, 2003  
TC/A.U. : 1711  
Examiner : Nathan M. Nutter

Docket No. : 1998B037A/2  
Customer No. : 1473

Hon. Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

New York, New York 10020  
April 22, 2004

**DECLARATION OF SRIVATSAN SRINIVAS, Ph.D.**

Sir:

I, SRIVATSAN SRINIVAS, Ph.D., declare that:

1. I am a Senior Research Engineer at ExxonMobil Chemical Company, 5200 Bayway Drive, Baytown, Texas, 77520-2101. I make this declaration in support of Datta et al.'s U.S. patent application serial no. 10/613,374 (the "Datta '374 application").
2. I received a Bachelor's degree in chemical engineering from the Indian Institute of Technology in Madras, India, in 1990. I earned an M.S. degree in chemical engineering from Virginia Polytechnic Institute and State University ("Virginia Tech.") in 1992. I received a Ph.D. degree in materials science and engineering from Virginia Tech. in 1996. I also hold an M.B.A. degree from the University of Texas at Austin, which I received in 2004.
3. From June 1996 to October 1997, I was a post-doctoral associate in the Department of Chemistry at Virginia Tech. I have worked at ExxonMobil Chemical Company since October 1997. From October 1997 to October 2000, I worked in the Polymer Science Division on the structure-property relationships of polyolefins.

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4. Since October 2000, I have worked in the Ethylene Elastomers Business on the structure and properties of elastomers.

5. I have reviewed and am familiar with the Datta '374 application. In several examples, the application discloses that a polymer called Escorene 4292 is blended with various propylene ethylene copolymers (pages 39, 41, 47). I am familiar with Escorene 4292, which is an isotactic homopolypropylene that is commercially available from ExxonMobil Chemical Company.

6. In the course of my work at ExxonMobil, I have on many occasions requested that polymer samples be tested by ExxonMobil's gel permeation chromatography ("GPC") laboratory in Baytown, Texas, to obtain data about the molecular weight of polymers. GPC is a standard analytical testing method that people who work in this field of polymers regularly use to obtain molecular weight data about polymers. I regularly rely on GPC data in connection with my work for ExxonMobil.

7. Exhibit 1 to this declaration is a true and correct copy of two documents that I prepared. The first page is a list of 13 polymer samples, identified as "Resin A" through "Resin M" that were tested at my request by ExxonMobil's GPC laboratory. Item number 1 is identified as "PP 4292" and "Resin A." This entry refers to Escorene 4292. The second page is a table that I prepared that lists molecular weight data for the 13 polymer samples listed on the previous page. In the column labelled "Resin," the entries "A" through "M" correspond to Resins A through M that are listed on the first page.

8. The row labelled "A" sets forth molecular weight data for Escorene 4292. The information recorded in this row reflects that: ExxonMobil's GPC laboratory tested a sample of Escorene 4292, I received the test results, and I accurately recorded the test results in this table. The entry in this row and in the column labelled "M<sub>w</sub>" shows that weight average


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molecular weight for Escorene 4292 was determined to be about 369,000. I believe that this value is representative of the weight average molecular weight for this material.

9. I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the Data '374 application or any patent issuing therefrom.

Dated: April 21, 2004  
Houston, Texas

  
Srivatsan Srinivas, Ph.D.

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HERSHKOVITZ & ASSOCIATES

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**EXHIBIT 1**

List of samples to be sent to Henning Winter

1.	PP 4292	-	1.3 - 1.7	-	Resin A
2.	PP 1042	-	1.5 - 2.3	-	Resin B
3.	PP 4062	-	3.0 - 4.2	-	Resin C
4.	PP 1012	-	4.0 - 6.5	-	Resin D
5.	PD 4443	-	6.2 - 8.3	-	Resin E
6.	PP 1024	-	10.0 - 15.0	-	Resin F
7.	PP 1044	-	16.0 - 21.0	-	Resin G
8.	PP 3155	-	33.0 - 39.0	-	Resin H
9.	PP 3445	-	33.0 - 39.0	-	Resin I
10.	PP 1105	-	34.0 - 40.0	-	Resin J
11.	PP 3505G E1-	-	360 - 440	-	Resin K
12.	PP 3546G	-	1085 - 1315	-	Resin L
13.	PP 3746G	-	1350 - 1600	-	Resin M

Resin	M <sub>n</sub>	M <sub>p</sub>	M <sub>w</sub>	M <sub>z</sub>	M <sub>z+1</sub>	(M <sub>n</sub> M <sub>w</sub> ) <sup>0.5</sup>	M <sub>w</sub> /M <sub>n</sub>	M <sub>z</sub> /M <sub>w</sub>	M <sub>z+1</sub> /M <sub>w</sub>
A	92203	215639	368935	964632	1700855	184436.75	4.00	2.61	4.61
B	85048	207748	350811	892191	1627860	173541.85	4.09	2.54	4.64
C	65372	193366	313364	934937	1801051	143126.63	4.79	2.98	5.75
D	61068	176830	299741	940573	1838343	124687.47	5.78	3.14	6.13
E	61417	172158	259679	666671	1288736	128327.95	4.09	2.57	4.96
F	43239	156082	247744	847946	1777897	103499.77	5.73	3.42	7.18
G	61234	156082	178353	358999	626168	104504.87	2.91	2.01	3.51
H	40452	145351	171462	349391	599274	83282.54	4.24	2.04	3.50
I	41508	139024	158967	305216	525902	81230.55	3.83	1.92	3.31
J	39004	150820	177556	405363	797573	83314.91	4.54	2.28	4.49
K	24522	65128	93914	244242	535304	47989.16	3.83	2.60	5.70
L	22029	53876	65663	126704	200972	38032	2.98	1.93	3.06
M	20068	48939	60271	114349	177268	34769	3.00	1.90	2.94